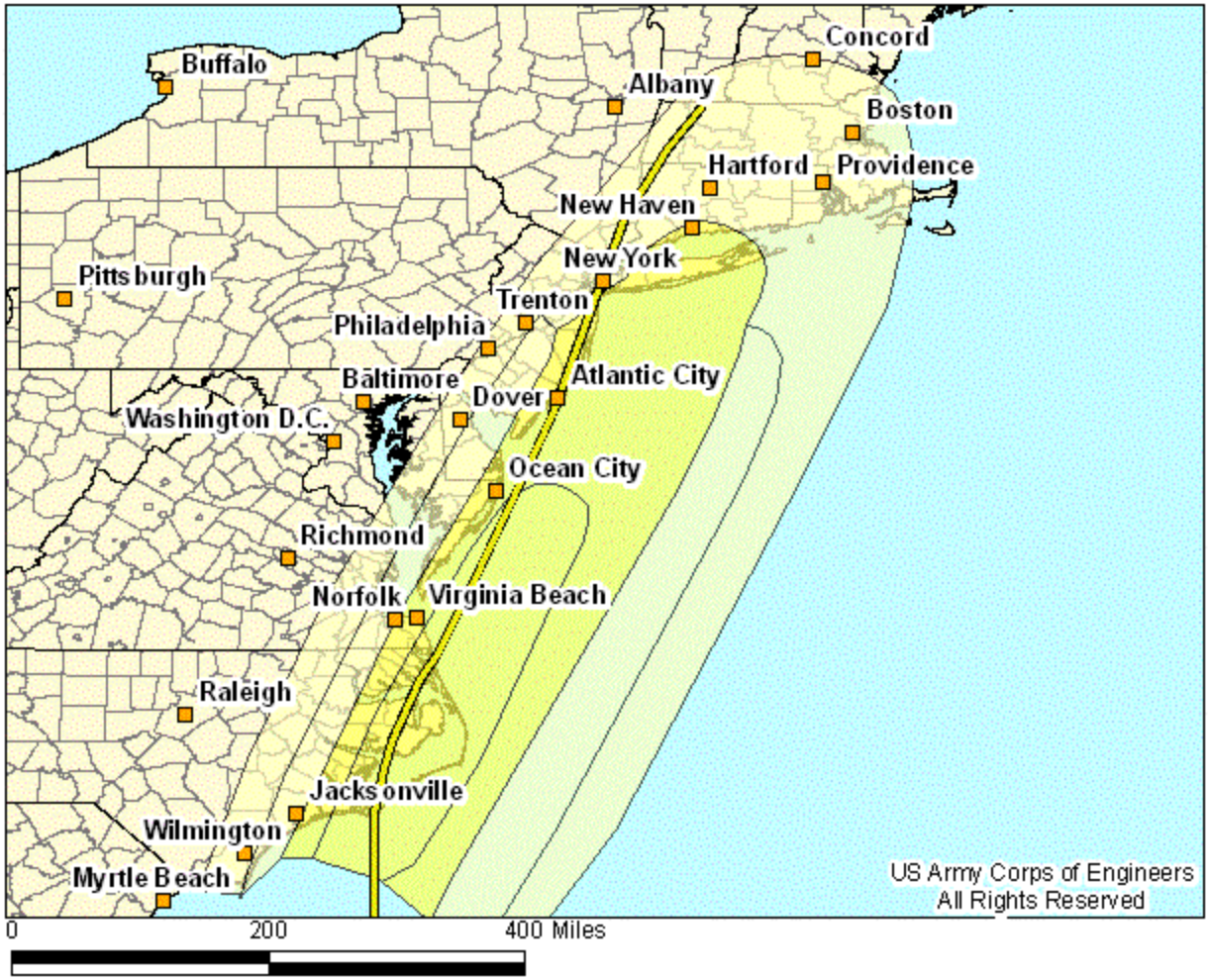
US Army Corps of Engineers

Hurricane Irene Projected Damage Areas

Landfall Plus About 24 Hours

For Planning Purposes Only!



Post Landfall Projected Damage Areas

This model is based on a Category 1 storm making landfall Outer Banks, NC and New York, NY.

Historic Track

Projected Damage Areas

- CAT 0-type damage
- CAT 1-type damage
- CAT 2-type damage
- CAT 3-type damage
- CAT 4-type damage
- CAT 5-type damage

Information provided on this page displays a projected or actual Category 1 storm making landfall Outer Banks, NC and New York, NY. These projections are based on information from the NHC (1700 EDT 08/28/2011) forecast and extrapolated by LRL staff to represent a landfall condition that has either occurred or may occur in the near future.

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

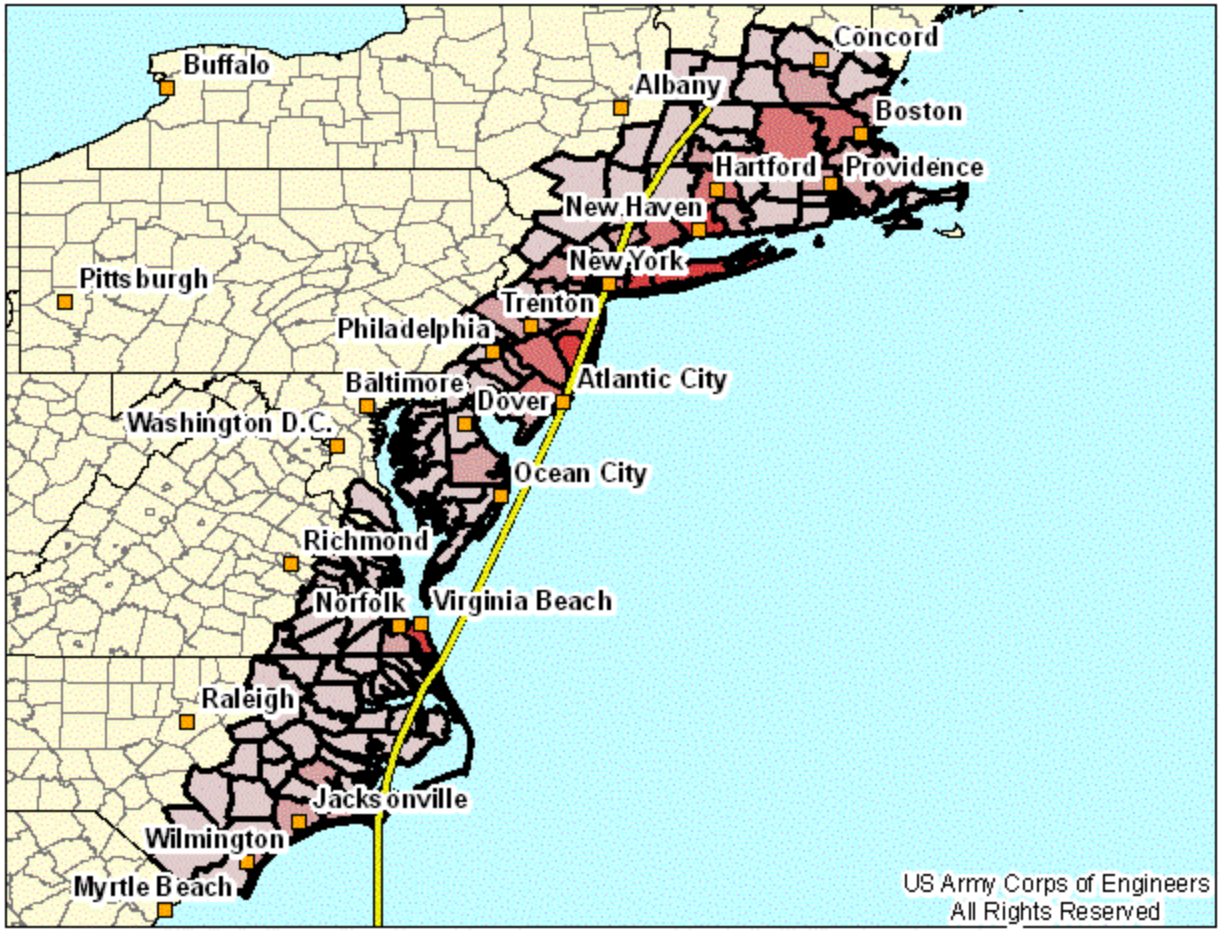
Hurricane Irene Projected Damage Areas	
Generated By: Siemsen, LRL 1100 EDT 08/30/2011	
Sources: HURREVAC LRL-DEBRIS	Page 1 of 20

US Army Corps of Engineers

Hurricane Irene Debris Model

Landfall Plus About 24 Hours

For Planning Purposes Only!



Post Landfall Debris Model Results

New Jersey - 4,325,000 Yards
New York - 2,960,000 Yards
Massachusetts - 1,882,000 Yards
Virginia - 1,645,000 Yards
Connecticut - 1,640,000 Yards
North Carolina - 1,177,000 Yards
Pennsylvania - 591,000 Yards
Rhode Island - 354,000 Yards
New Hampshire - 297,000 Yards
Delaware - 280,000 Yards
Maryland - 264,000 Yards
Vermont - 32,000 Yards

Model results per County on following page

This model is based on a Category 1 storm making landfall Outer Banks, NC and New York, NY.

Historic Track

Debris

- < 100,000 cubic yards
- 100,000 - 249,999 cubic yards
- 250,000 - 499,999 cubic yards
- 500,000 - 999,999 cubic yards
- >1,000,000 cubic yards

Information provided on this page displays a Category 1 storm making landfall Outer Banks, NC and New York, NY. These projections are based on information from the NHC (1700 EDT 08/28/2011) forecast. The amount of debris forecasted is possible total volume, not necessarily the volume that may need to be removed with Federal funds, but does not include volume that may be covered by private insurance. Debris volume may include storm surge generated debris.

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane Irene Debris Model

Generated By:
Siemsen, LRL 1100 EDT 08/30/2011

Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane Irene Debris Model

Landfall Plus About 24 Hours

For Planning Purposes Only!

State	Yards per State	County	Yards per County
Connecticut		Fairfield County	428,000
		Hartford County	319,000
		Litchfield County	91,000
		Middlesex County	103,000
		New Haven County	514,000
		New London County	87,000
		Tolland County	48,000
		Windham County	50,000
Connecticut	1,640,000		
Delaware		Kent County	84,000
		New Castle County	6,000
		Sussex County	190,000
Delaware	280,000		
Maryland		Caroline County	17,000
		Dorchester County	22,000
		Kent County	< 1,000
		Queen Anne's County	2,000
		Somerset County	27,000
		St. Mary's County	13,000
		Talbot County	11,000
		Wicomico County	80,000
		Worcester County	92,000
Maryland	264,000		
Massachusetts		Barnstable County	38,000
		Berkshire County	48,000
		Bristol County	118,000
		Dukes County	9,000
		Essex County	174,000

State	Yards per State	County	Yards per County
Massachusetts		Franklin County	35,000
(continued)		Hampden County	129,000
		Hampshire County	58,000
		Middlesex County	385,000
		Norfolk County	187,000
		Plymouth County	144,000
		Suffolk County	221,000
		Worcester County	336,000
Massachusetts	1,882,000		
New Hampshire		Cheshire County	40,000
		Hillsborough County	126,000
		Merrimack County	38,000
		Rockingham County	91,000
		Strafford County	< 1,000
		Sullivan County	2,000
New Hampshire	297,000		
New Jersey		Atlantic County	276,000
		Bergen County	332,000
		Burlington County	293,000
		Camden County	211,000
		Cape May County	166,000
		Cumberland County	111,000
		Essex County	263,000
		Gloucester County	162,000
		Hudson County	176,000
		Hunterdon County	36,000
		Mercer County	143,000

The amount of debris forecasted is possible total volume, not necessarily the volume that may need to be removed with Federal funds, but does not include volume that may be covered by private insurance. Debris volume may include storm surge generated debris.

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Source: US Army Corps of Engineers, All Rights Reserved

Hurricane Irene Debris Model

Generated By:
Siemsen, LRL 1100 EDT 08/30/2011

Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane Irene Debris Model

Landfall Plus About 24 Hours

For Planning Purposes Only!

State	Yards per State	County	Yards per County
New Jersey		Middlesex County	282,000
(continued)		Monmouth County	476,000
		Morris County	147,000
		Ocean County	767,000
		Passaic County	189,000
		Salem County	39,000
		Somerset County	127,000
		Sussex County	2,000
		Union County	127,000
New Jersey	4,325,000		
New York		Bronx County	103,000
		Columbia County	4,000
		Dutchess County	100,000
		Kings County	219,000
		Nassau County	791,000
		New York County	76,000
		Orange County	56,000
		Putnam County	28,000
		Queens County	319,000
		Richmond County	91,000
		Rockland County	61,000
		Suffolk County	881,000
		Ulster County	8,000
		Westchester County	223,000
New York	2,960,000		
North Carolina		Beaufort County	52,000
		Bertie County	19,000
		Bladen County	< 1,000
		Brunswick County	52,000

State	Yards per State	County	Yards per County
North Carolina		Camden County	22,000
(continued)		Carteret County	118,000
		Chowan County	18,000
		Columbus County	3,000
		Craven County	125,000
		Currituck County	40,000
		Dare County	68,000
		Duplin County	25,000
		Edgecombe County	10,000
		Gates County	11,000
		Greene County	10,000
		Halifax County	5,000
		Hertford County	11,000
		Hyde County	25,000
		Jones County	15,000
		Lenoir County	23,000
		Martin County	19,000
		New Hanover County	138,000
		Northampton County	8,000
		Onslow County	102,000
		Pamlico County	31,000
		Pasquotank County	71,000
		Pender County	32,000
		Perquimans County	21,000
		Pitt County	46,000
		Sampson County	< 1,000
		Tyrrell County	17,000
		Washington County	29,000
		Wayne County	11,000

The amount of debris forecasted is possible total volume, not necessarily the volume that may need to be removed with Federal funds, but does not include volume that may be covered by private insurance. Debris volume may include storm surge generated debris.

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Source: US Army Corps of Engineers, All Rights Reserved

Hurricane Irene Debris Model

Generated By:
Siemsen, LRL 1100 EDT 08/30/2011

Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane Irene Debris Model

Landfall Plus About 24 Hours

For Planning Purposes Only!

State	Yards per State	County	Yards per County
North Carolina		Wilson County	< 1,000
North Carolina	1,177,000		
Pennsylvania		Bucks County	118,000
		Delaware County	99,000
		Montgomery County	91,000
		Philadelphia County	283,000
Pennsylvania	591,000		
Rhode Island		Bristol County	23,000
		Kent County	71,000
		Newport County	36,000
		Providence County	184,000
		Washington County	40,000
Rhode Island	354,000		
Vermont		Bennington County	< 1,000
		Windham County	32,000
Vermont	32,000		
Virginia		Accomack County	46,000
		Charles City County	< 1,000
		Chesapeake city	211,000
		Franklin city	6,000
		Gloucester County	24,000
		Greensville County	< 1,000
		Hampton city	82,000
		Isle of Wight County	22,000
		James City County	49,000
		King William County	< 1,000
		King and Queen County	2,000
Virginia (continued)		Lancaster County	10,000
		Mathews County	10,000
		Middlesex County	9,000
		New Kent County	< 1,000
		Newport News city	186,000
		Norfolk city	209,000
		Northampton County	15,000
		Northumberland County	8,000
		Poquoson city	13,000
		Portsmouth city	100,000
		Prince George County	< 1,000
		Richmond County	< 1,000
		Southampton County	10,000
		Suffolk city	74,000
		Surry County	6,000
		Sussex County	4,000
		Virginia Beach city	503,000
		Williamsburg city	7,000
		York County	39,000
Virginia	1,645,000		

The amount of debris forecasted is possible total volume, not necessarily the volume that may need to be removed with Federal funds, but does not include volume that may be covered by private insurance. Debris volume may include storm surge generated debris.

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Hurricane Irene Debris Model

Generated By:
Siemsen, LRL 1100 EDT 08/30/2011

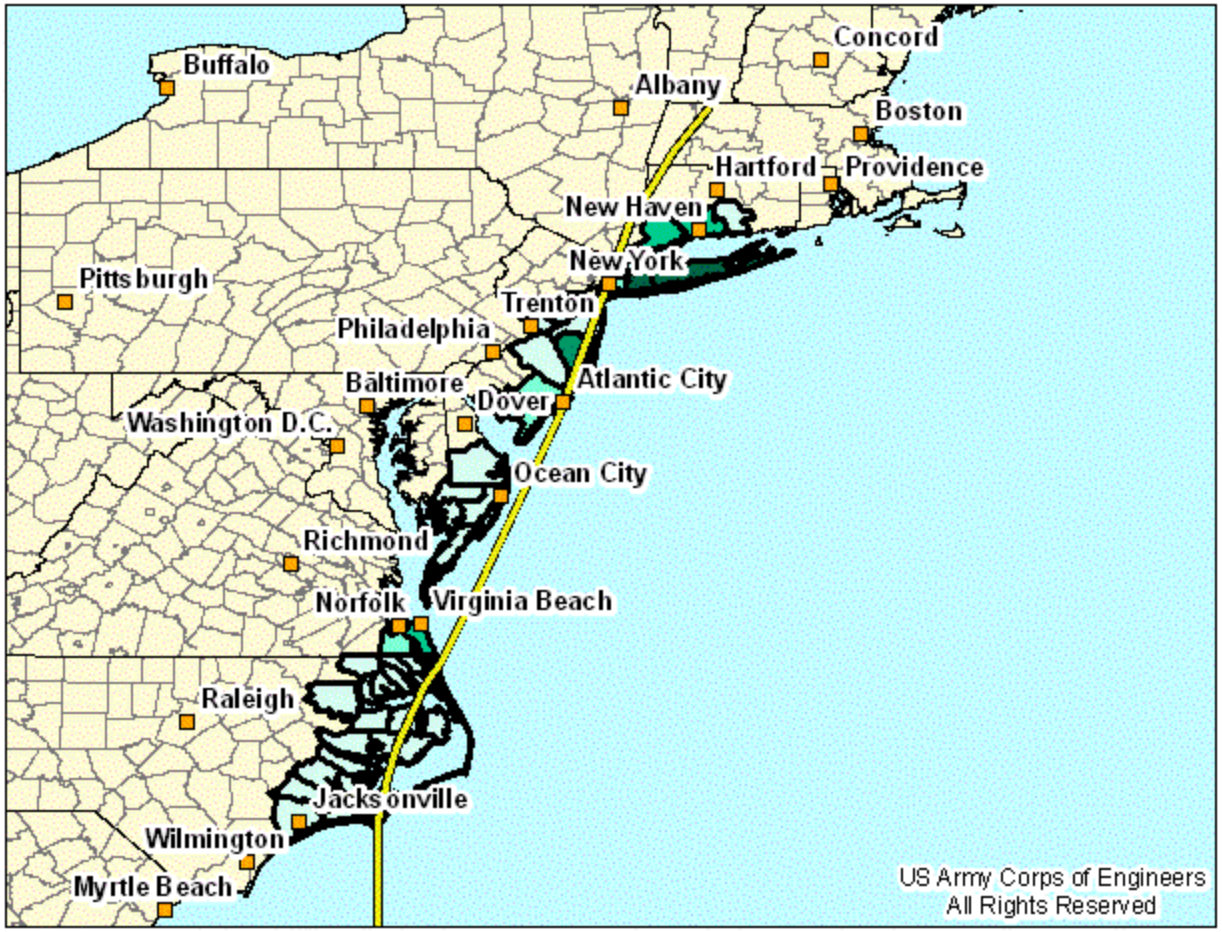
Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane Irene Commodities Model

Landfall Plus About 24 Hours

For Planning Purposes Only!



0 200 400 Miles

Post Landfall Water Model Results

Day One / Day Two / Day Three

New York – 26/52/105 Truckloads
New Jersey – 11/22/45 Truckloads
Virginia – 8/16/32 Truckloads
Connecticut – 8/16/31 Truckloads
North Carolina – 8/15/29 Truckloads
Maryland – 2/3/5 Truckloads
Delaware – 1/2/3 Truckloads

Model results per County on following page

This model is based on a Category 1 storm making landfall Outer Banks, NC and New York, NY.

Historic Track

Commodities

- < 5 Trucks Each
- 5 - 10 Trucks Each
- 11 - 20 Trucks Each
- 21 - 40 Trucks Each
- > 40 Trucks Each

Information provided on this page displays a Category 1 storm making landfall Outer Banks, NC and New York, NY. These projections are based on information from the NHC ***(1700 EDT 08/28/2011)*** forecast. The amount of commodities forecasted is based on Mission Guide Book requirements and SME input. The graphic represents daily needs with a ramp-up in the distribution system – three days for Points of Distribution (PODs) to be fully in place and operational. Volume shown is for each commodity – water and ice. Commodity need may be supplied by multiple agencies and/or sources.

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane Irene Commodities Model	
Generated By: Siemsen, LRL 1100 EDT 08/30/2011	
Sources: HURREVAC LRL-DEBRIS	Page 6 of 20

US Army Corps of Engineers

Hurricane Irene Commodities Model

Landfall Plus About 24 Hours

For Planning Purposes Only!

State	Truckloads per State	County	Truckloads per County
Connecticut		Fairfield County	12
		Middlesex County	1
		New Haven County	18
Connecticut	31		
Delaware		Sussex County	3
Delaware	3		
Maryland		Somerset County	1
		Wicomico County	1
		Worcester County	3
Maryland	5		
New Jersey		Atlantic County	10
		Burlington County	1
		Cape May County	5
		Cumberland County	1
		Mercer County	1
		Middlesex County	1
		Monmouth County	4
		Ocean County	22
New Jersey	45		
New York		Kings County	1
		Nassau County	45
		Queens County	8
		Suffolk County	51
New York	105		
North Carolina		Beaufort County	1
		Bertie County	1
North Carolina (continued)		Camden County	1
		Carteret County	4
		Chowan County	1
		Craven County	4
		Currituck County	2
		Dare County	3
		Gates County	1
		Hyde County	1
		Jones County	1
		Onslow County	2
		Pamlico County	1
		Pasquotank County	3
		Perquimans County	1
		Tyrrell County	1
		Washington County	1
North Carolina	29		
Virginia		Accomack County	2
		Chesapeake city	7
		Norfolk city	7
		Northampton County	1
		Portsmouth city	1
		Virginia Beach city	14
Virginia	32		

Source: US Army Corps of Engineers, All Rights Reserved

The amount of commodities forecasted is based on Mission Guide Book requirements and SME input and the above table indicates suggested daily needs based on full deployment of a commodities distribution system. Volume shown is for each commodity – water and ice. Commodity need may be supplied by multiple agencies and/or sources.

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane Irene Commodities Model

Generated By:
Siemsen, LRL 1100 EDT 08/30/2011

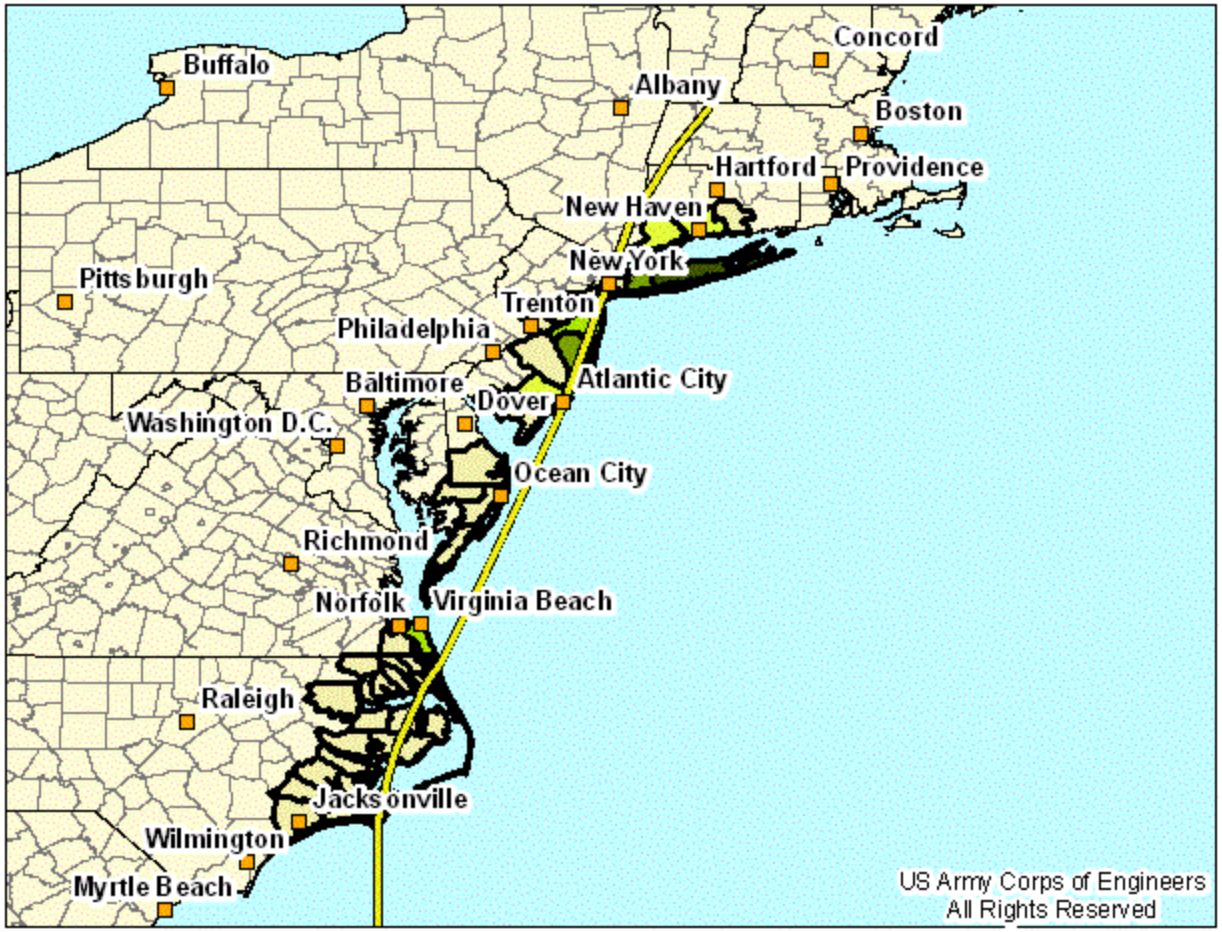
Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane Irene Temporary Roofing Model

Landfall Plus About 24 Hours

For Planning Purposes Only!



Post Landfall Temporary Roofing Model Results

New York - 20,600
New Jersey - 16,300
Virginia - 8,200
Connecticut - 7,200
North Carolina - 5,000
Maryland - 800
Delaware - 800

Model results per County on following page

This model is based on a Category 1 storm making landfall Outer Banks, NC and New York, NY.

Historic Track

Temporary Roofing

- < 2,000 units
- 2,000 - 3,999 units
- 4,000 - 5,999 units
- 6,000 - 9,999 units
- > 10,000 units

Information provided on this page displays a Category 1 storm making landfall Outer Banks, NC and New York, NY. These projections are based on information from the NHC (1700 EDT 08/28/2011) forecast. Temporary roofing is based on 5% in CAT 1.

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane Irene Roofing Model	
Generated By: Siemsen, LRL 1100 EDT 08/30/2011	
Sources: HURREVAC LRL-DEBRIS	Page 8 of 20

US Army Corps of Engineers

Hurricane Irene Temporary Roofing Model

Landfall Plus About 24 Hours

For Planning Purposes Only!

State	House Units per State	County	House Units per County
Connecticut		Fairfield County	2,900
		Middlesex County	300
		New Haven County	4,000
Connecticut	7,200		
Delaware		Sussex County	800
Delaware	800		
Maryland		Wicomico County	< 100
		Worcester County	800
Maryland	800		
New Jersey		Atlantic County	2,600
		Burlington County	< 100
		Cape May County	1,600
		Cumberland County	< 100
		Mercer County	< 100
		Middlesex County	< 100
		Monmouth County	5,300
		Ocean County	6,800
New Jersey	16,300		
New York		Kings County	< 100
		Nassau County	8,100
		Queens County	1,300
		Suffolk County	11,200
New York	20,600		
North Carolina		Beaufort County	200
		Bertie County	< 100
		Camden County	200

State	House Units per State	County	House Units per County
North Carolina		Carteret County	900
(continued)		Chowan County	200
		Craven County	900
		Currituck County	500
		Dare County	600
		Gates County	< 100
		Hyde County	< 100
		Jones County	< 100
		Onslow County	200
		Pamlico County	200
		Pasquotank County	600
		Perquimans County	300
		Tyrrell County	< 100
		Washington County	200
North Carolina	5,000		
Virginia		Accomack County	500
		Chesapeake city	1,700
		Norfolk city	1,400
		Northampton County	200
		Portsmouth city	< 100
		Virginia Beach city	4,400
Virginia	8,200		

Temporary roofing is based on 5% in CAT 1.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

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Hurricane Irene Roofing Model

Generated By:
Siemsen, LRL 1100 EDT 08/30/2011

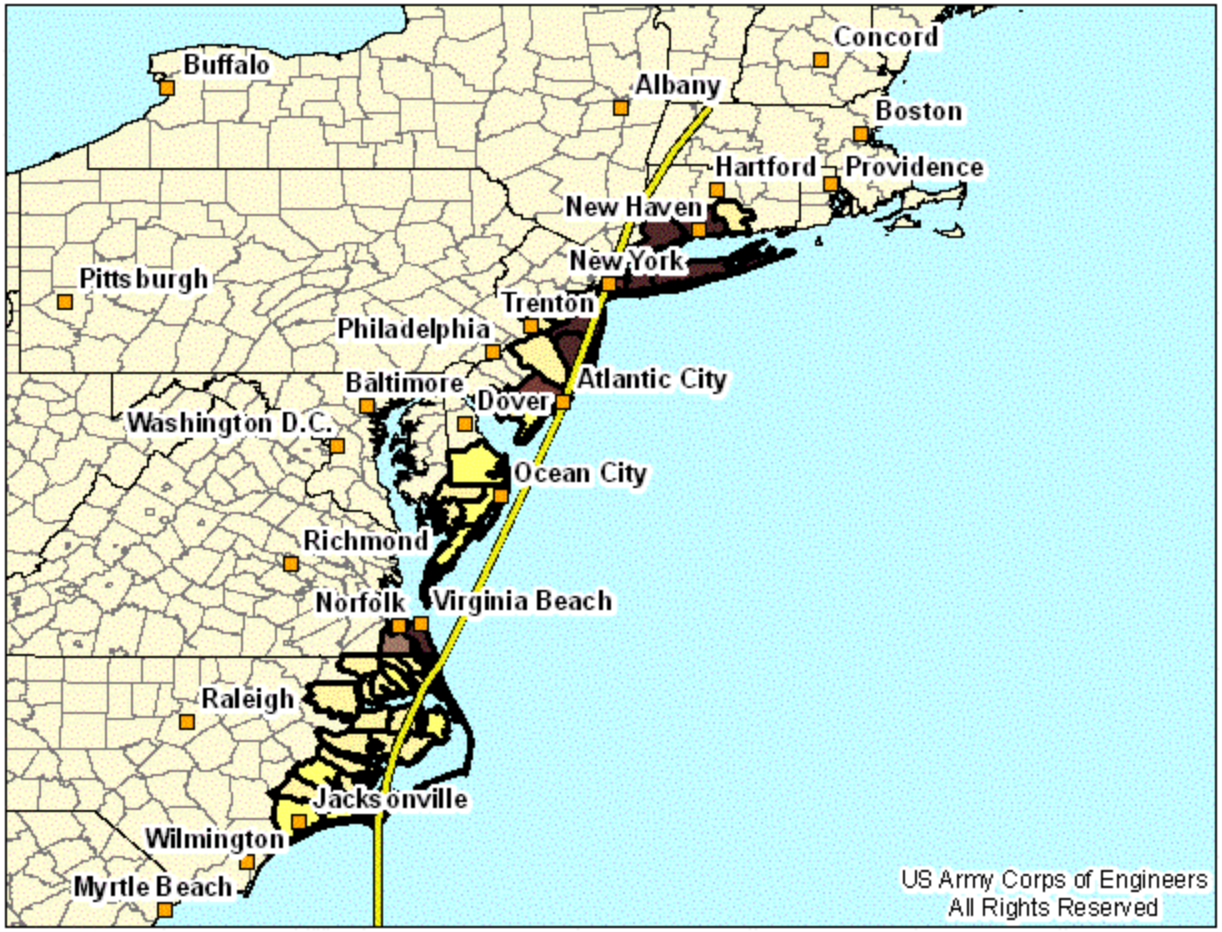
Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane Irene Population Model

Landfall Plus About 24 Hours

For Planning Purposes Only!



Post Landfall Population Model Results

New York - 2,855,000
New Jersey - 1,338,000
Virginia - 762,000
Connecticut - 673,000
North Carolina - 352,000
Delaware - 57,000
Maryland - 49,000

Model results per County on following page

This model is based on a Category 1 storm making landfall Outer Banks, NC and New York, NY.

Historic Track

Population

- < 25,000 persons
- 25,000 - 99,999 persons
- 100,000 - 174,999 persons
- 175,000 - 249,999 persons
- > 250,000 persons

Information provided on this page displays a Category 1 storm making landfall Outer Banks, NC and New York, NY. These projections are based on information from the NHC (1700 EDT 08/28/2011) forecast. The numbers of persons included in this model output are those that would be included within estimated hurricane force winds (Census 2000 values adjusted to July 2010 values).

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane Irene Population Model	
Generated By: Siemsen, LRL 1100 EDT 08/30/2011	
Sources: HURREVAC LRL-DEBRIS	Page 10 of 20

US Army Corps of Engineers

Hurricane Irene Population Model

Landfall Plus About 24 Hours

For Planning Purposes Only!

State	Population per State	County	Population per County
Connecticut		Fairfield County	267,000
		Middlesex County	17,000
		New Haven County	389,000
Connecticut	673,000		
Delaware		Sussex County	57,000
Delaware	57,000		
Maryland		Somerset County	< 1,000
		Wicomico County	4,000
		Worcester County	45,000
Maryland	49,000		
New Jersey		Atlantic County	232,000
		Burlington County	4,000
		Cape May County	96,000
		Cumberland County	< 1,000
		Mercer County	4,000
		Middlesex County	2,000
		Monmouth County	428,000
		Ocean County	572,000
New Jersey	1,338,000		
New York		Kings County	< 1,000
		Nassau County	1,122,000
		Queens County	219,000
		Suffolk County	1,514,000
New York	2,855,000		
North Carolina		Beaufort County	17,000
		Bertie County	< 1,000

State	Population per State	County	Population per County
North Carolina		Camden County	10,000
(continued)		Carteret County	66,000
		Chowan County	10,000
		Craven County	69,000
		Currituck County	25,000
		Dare County	35,000
		Gates County	< 1,000
		Hyde County	6,000
		Jones County	3,000
		Onslow County	26,000
		Pamlico County	13,000
		Pasquotank County	42,000
		Perquimans County	13,000
		Tyrrell County	5,000
		Washington County	12,000
North Carolina	352,000		
Virginia		Accomack County	32,000
		Chesapeake city	167,000
		Norfolk city	115,000
		Northampton County	12,000
		Portsmouth city	< 1,000
		Virginia Beach city	436,000
Virginia	762,000		

The number of persons estimated to be within the hurricane force winds comes from Census 2000 values adjusted to July 2010 values.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Source: US Army Corps of Engineers, All Rights Reserved

Hurricane Irene Population Model

Generated By:
Siemsen, LRL 1100 EDT 08/30/2011

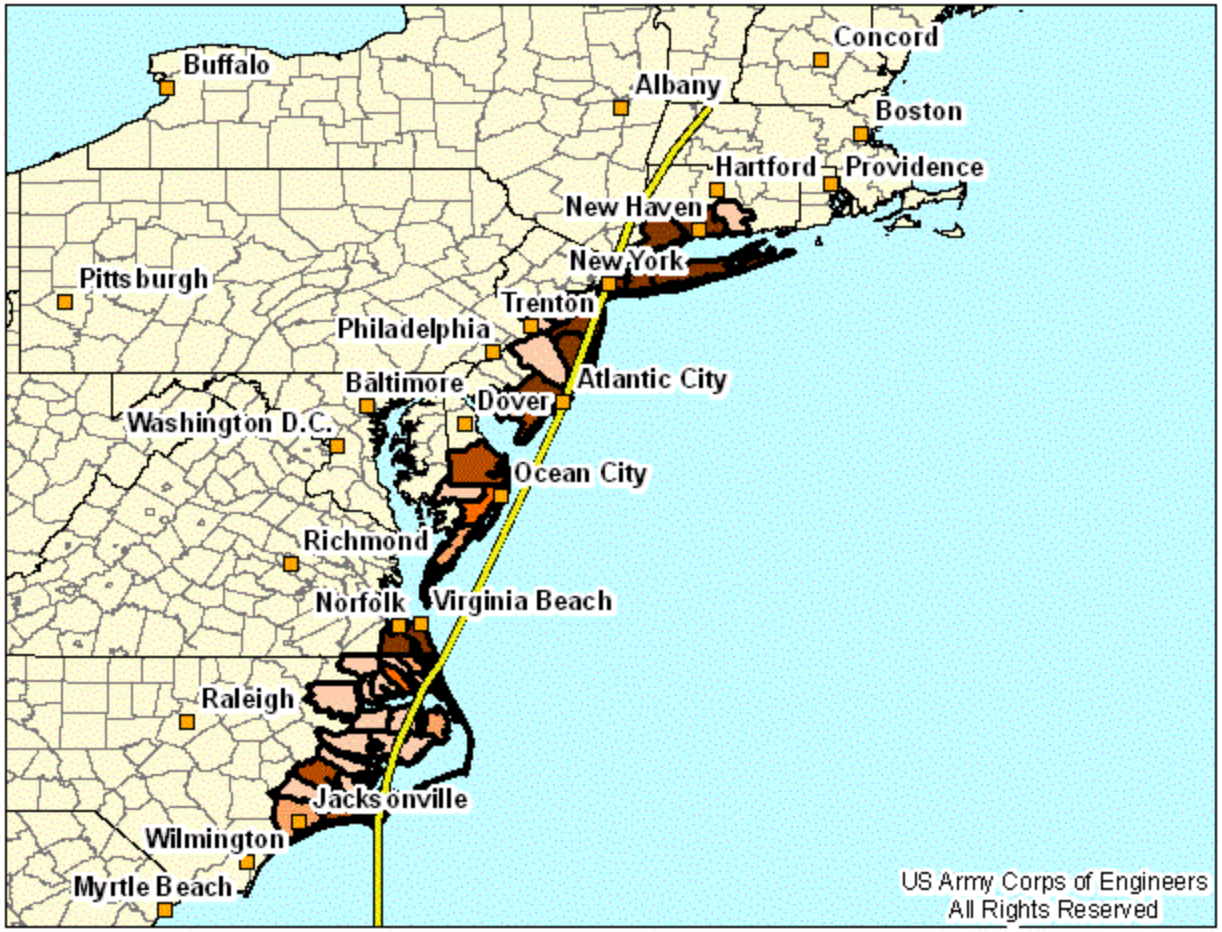
Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane Irene Households Model

Landfall Plus About 24 Hours

For Planning Purposes Only!



Post Landfall Households Model Results

New York - 945,000
New Jersey - 519,000
Virginia - 280,000
Connecticut - 259,000
North Carolina - 137,000
Delaware - 26,000
Maryland - 21,000

Model results per County on following page

This model is based on a Category 1 storm making landfall Outer Banks, NC and New York, NY.

Historic Track

Households

- < 7,500 households
- 7,500 - 14,999 households
- 15,000 - 24,999 households
- 25,000 - 49,999 households
- > 50000 households

Information provided on this page displays a Category 1 storm making landfall Outer Banks, NC and New York, NY. These projections are based on information from the NHC (1700 EDT 08/28/2011) forecast. The numbers of households included in this model output are those that would be included within estimated hurricane force winds (Census 2000 values adjusted to July 2010 values).

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane Irene Households Model	
Generated By: Siemsen, LRL 1100 EDT 08/30/2011	
Sources: HURREVAC LRL-DEBRIS	Page 12 of 20

US Army Corps of Engineers

Hurricane Irene Households Model

Landfall Plus About 24 Hours

For Planning Purposes Only!

State	Households per State	County	Households per County
Connecticut		Fairfield County	99,000
		Middlesex County	7,000
		New Haven County	153,000
Connecticut	259,000		
Delaware		Sussex County	26,000
Delaware	26,000		
Maryland		Wicomico County	2,000
		Worcester County	19,000
Maryland	21,000		
New Jersey		Atlantic County	88,000
		Burlington County	2,000
		Cape May County	40,000
		Cumberland County	< 1,000
		Mercer County	2,000
		Middlesex County	< 1,000
		Monmouth County	162,000
		Ocean County	225,000
New Jersey	519,000		
New York		Kings County	< 1,000
		Nassau County	372,000
		Queens County	73,000
		Suffolk County	500,000
New York	945,000		
North Carolina		Beaufort County	7,000
		Bertie County	< 1,000
		Camden County	4,000

State	Households per State	County	Households per County
North Carolina		Carteret County	28,000
(continued)		Chowan County	4,000
		Craven County	26,000
		Currituck County	10,000
		Dare County	15,000
		Gates County	< 1,000
		Hyde County	2,000
		Jones County	< 1,000
		Onslow County	8,000
		Pamlico County	5,000
		Pasquotank County	16,000
		Perquimans County	5,000
		Tyrrell County	2,000
		Washington County	5,000
North Carolina	137,000		
Virginia		Accomack County	13,000
		Chesapeake city	59,000
		Norfolk city	44,000
		Northampton County	5,000
		Portsmouth city	< 1,000
		Virginia Beach city	159,000
Virginia	280,000		

The number of households estimated to be within the hurricane force winds comes from Census 2000 values adjusted to July 2010 values.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Source: US Army Corps of Engineers, All Rights Reserved

Hurricane Irene Households Model

Generated By:
Siemsen, LRL 1100 EDT 08/30/2011

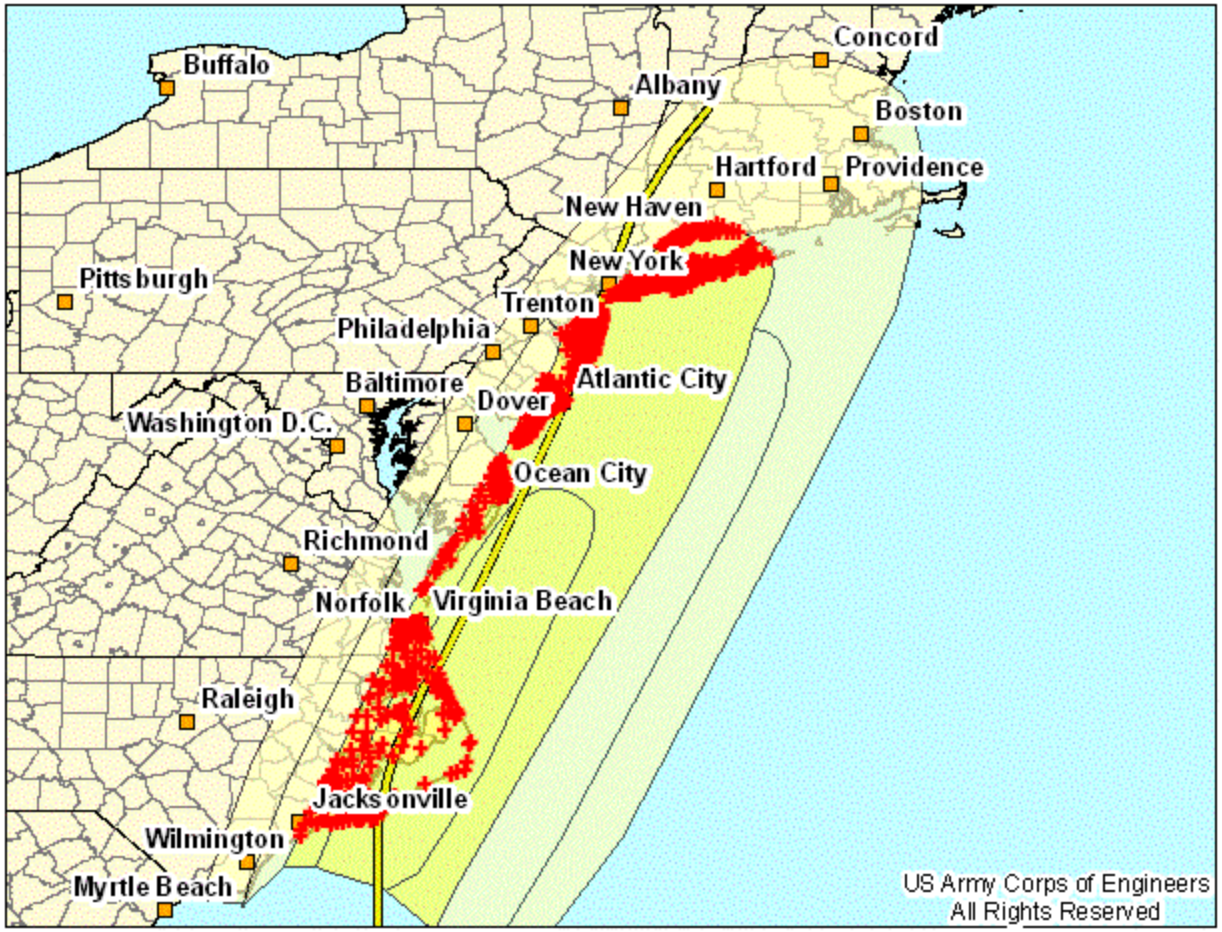
Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane Irene Fire Stations

Landfall Plus About 24 Hours

For Planning Purposes Only!



0 200 400 Miles

Most Probable Landfall Fire Stations Inside Hurricane Force Winds

New York - 350
New Jersey - 245
North Carolina - 152
Connecticut - 72
Virginia - 61
Maryland - 20
Delaware - 15

Model results per County on following page

This model is based on a Category 1 storm making landfall Outer Banks, NC and New York, NY.

+ Fire Stations
Historic Track

Information provided on this page displays a Category 1 storm making landfall Outer Banks, NC and New York, NY. These projections are based on information from the NHC (1700 EDT 08/28/2011) forecast.
The number of fire stations included in this output are those that would be included within estimated hurricane force winds (data source: HSIP Gold 2011).

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

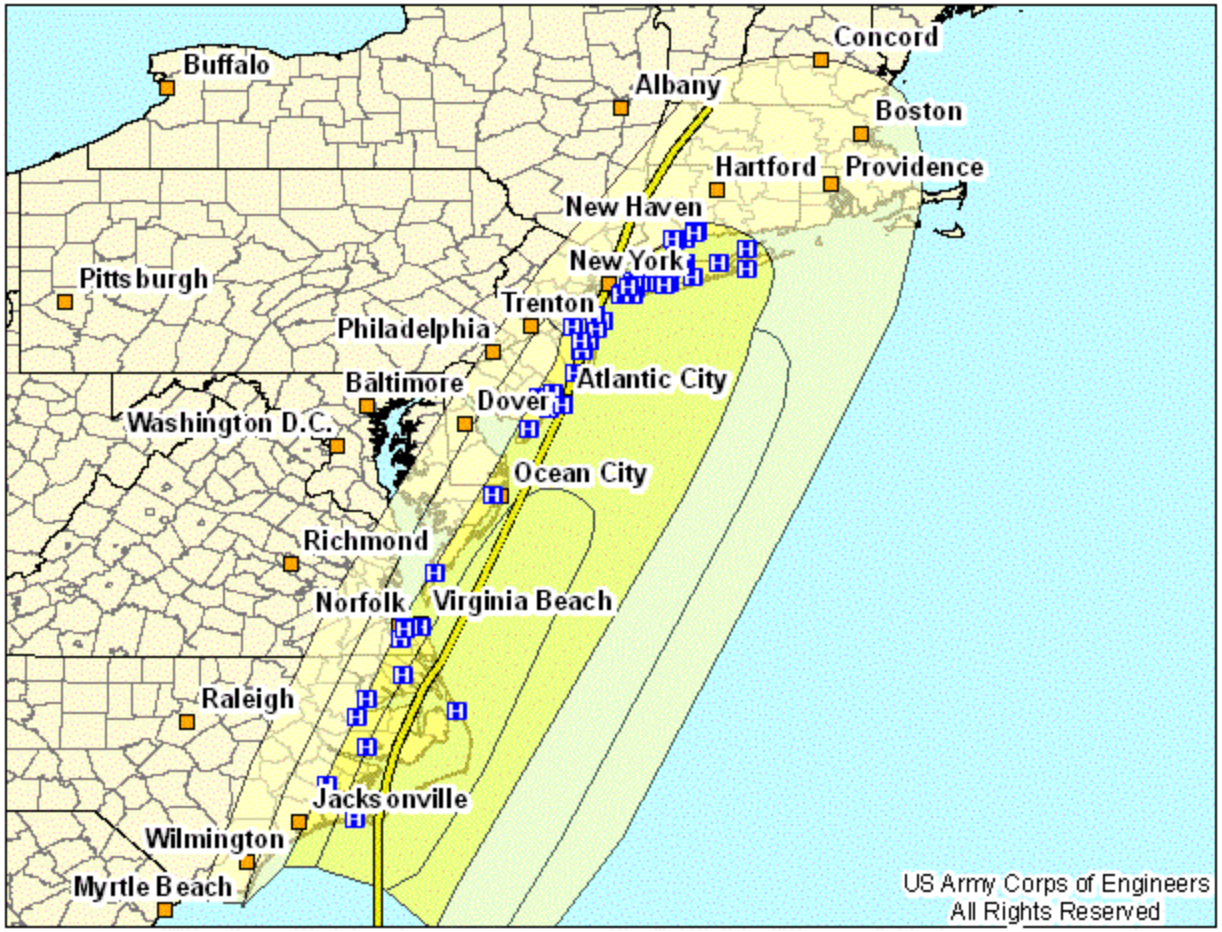
Hurricane Irene Fire Stations	
Generated By: Siemsen, LRL 1100 EDT 08/30/2011	
Sources: HURREVAC LRL-DEBRIS	Page 14 of 20

US Army Corps of Engineers

Hurricane Irene Hospitals

Landfall Plus About 24 Hours

For Planning Purposes Only!



0 200 400 Miles

Most Probable Landfall Hospitals Inside Hurricane Force Winds

New Jersey - 23
New York - 22
Virginia - 8
North Carolina - 8
Connecticut - 8
Maryland - 1

Model results per County on following page

This model is based on a Category 1 storm making landfall Outer Banks, NC and New York, NY.

H Hospitals
Historic Track

Information provided on this page displays a Category 1 storm making landfall Outer Banks, NC and New York, NY. These projections are based on information from the NHC (1700 EDT 08/28/2011) forecast.
The number of hospitals included in this output are those that would be included within estimated hurricane force winds (data source: HSIP Gold 2011).

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Hurricane Irene Hospitals	
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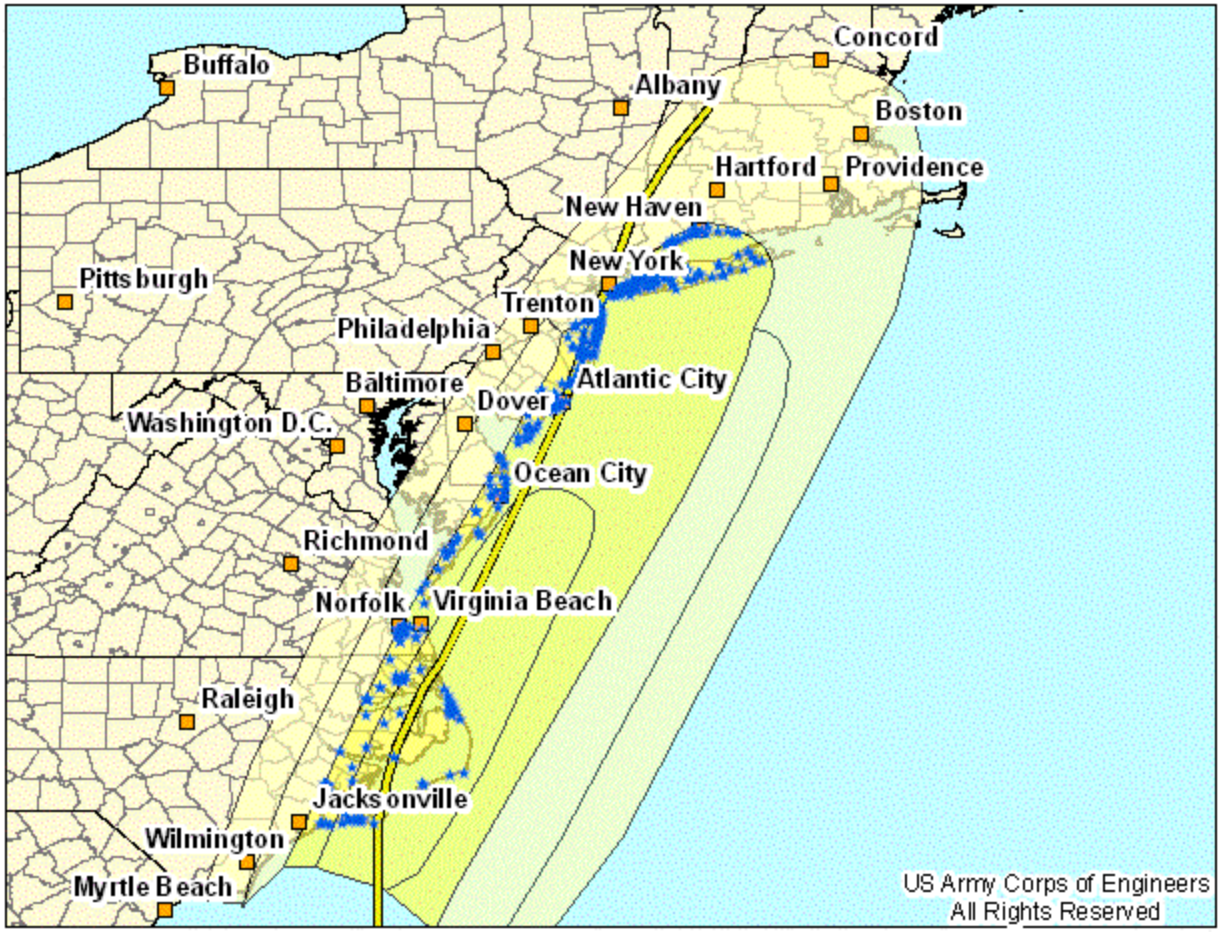
Sources: HURREVAC LRL-DEBRIS	Page 15 of 20

US Army Corps of Engineers

Hurricane Irene Law Enforcement

Landfall Plus About 24 Hours

For Planning Purposes Only!



Most Probable Landfall Law Enforcement Inside Hurricane Force Winds

New Jersey - 110
New York - 85
North Carolina - 70
Virginia - 34
Connecticut - 29
Maryland - 12
Delaware - 10

Model results per County on following page

This model is based on a Category 1 storm making landfall Outer Banks, NC and New York, NY.

★ Law Enforcement
Historic Track

Information provided on this page displays a Category 1 storm making landfall Outer Banks, NC and New York, NY. These projections are based on information from the NHC (1700 EDT 08/28/2011) forecast.
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Hurricane Irene Law Enforcement	
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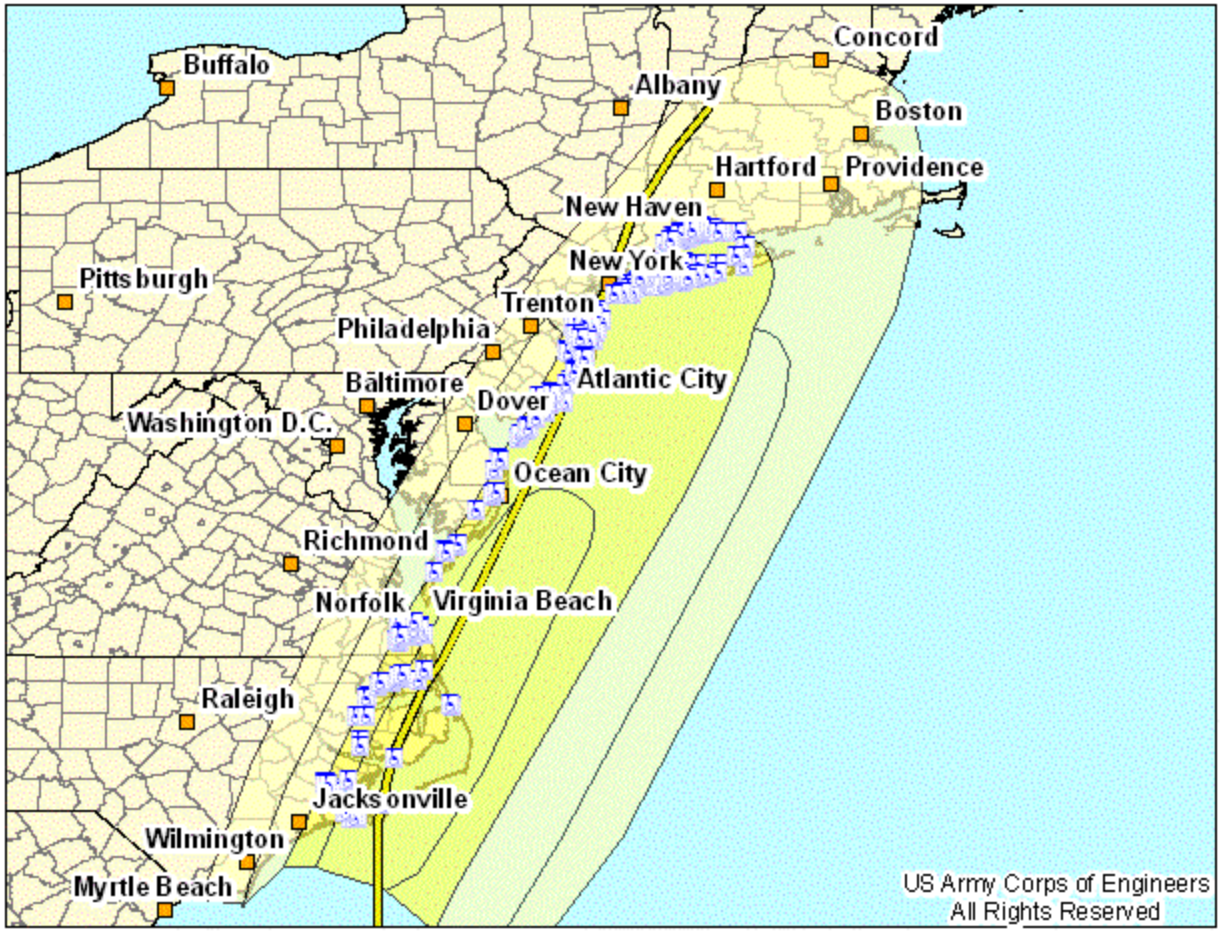
Sources: HURREVAC LRL-DEBRIS	Page 16 of 20

US Army Corps of Engineers

Hurricane Irene Nursing Homes

Landfall Plus About **24** Hours

For Planning Purposes Only!



Most Probable Landfall Nursing Homes Inside Hurricane Force Winds

New York - 156
New Jersey - 114
Connecticut - 65
Virginia - 62
North Carolina - 42
Maryland - 6
Delaware - 4

Model results per County on following page

This model is based on a Category 1 storm making landfall Outer Banks, NC and New York, NY.

Nursing Homes
Historic Track

Information provided on this page displays a Category 1 storm making landfall Outer Banks, NC and New York, NY. These projections are based on information from the NHC (1700 EDT 08/28/2011) forecast.
The number of nursing homes included in this output are those that would be included within estimated hurricane force winds (data source: HSIP Gold 2011).

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Hurricane Irene Nursing Homes	
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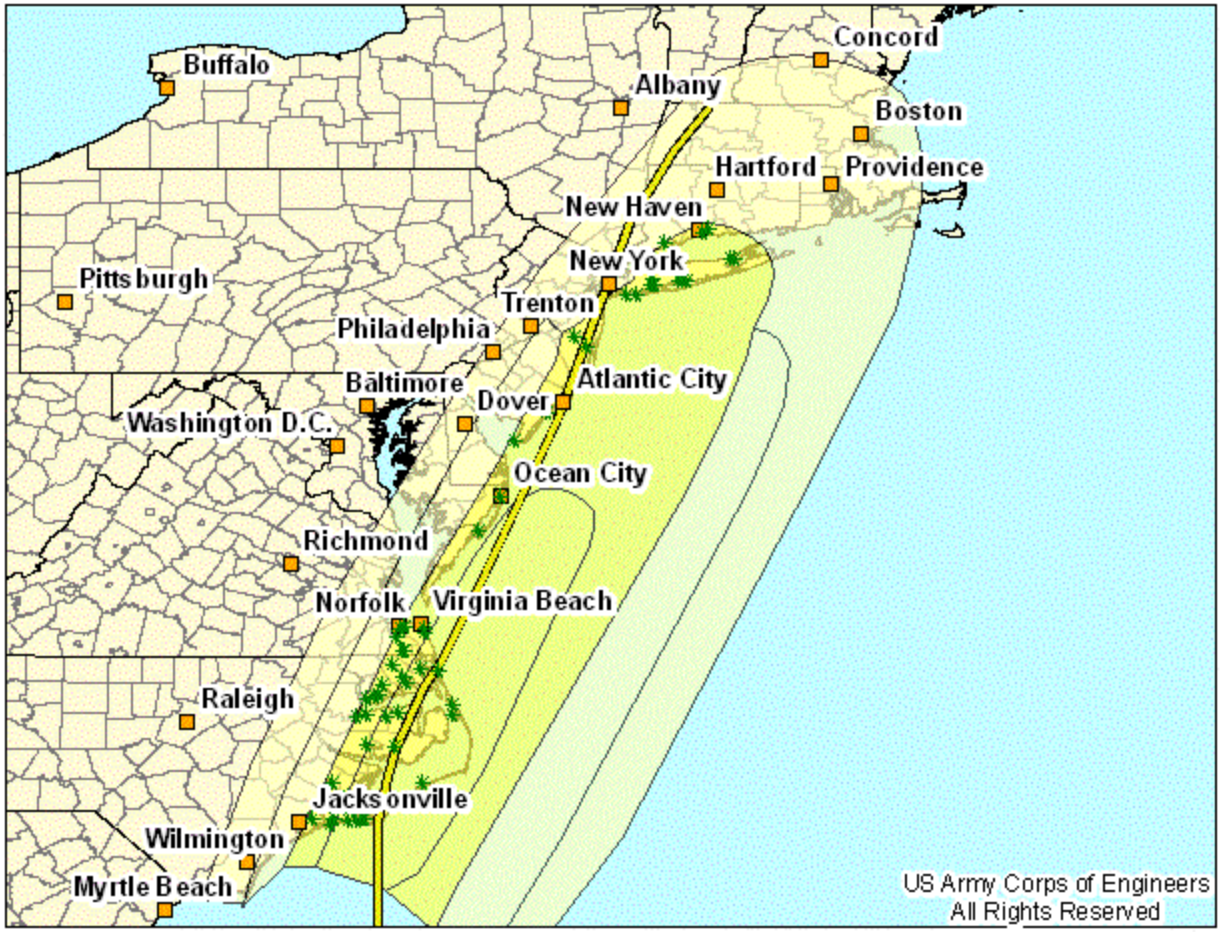
Sources: HURREVAC LRL-DEBRIS	Page 17 of 20

US Army Corps of Engineers

Hurricane Irene Potable Water

Landfall Plus About 24 Hours

For Planning Purposes Only!



Most Probable Landfall Potable Water Inside Hurricane Force Winds

North Carolina - 31
New York - 12
Virginia - 10
New Jersey - 4
Connecticut - 3
Maryland - 1

Model results per County on following page

This model is based on a Category 1 storm making landfall Outer Banks, NC and New York, NY.

* Potable Water
Historic Track

Information provided on this page displays a Category 1 storm making landfall Outer Banks, NC and New York, NY. These projections are based on information from the NHC (1700 EDT 08/28/2011) forecast.
The number of potable water included in this output are those that would be included within estimated hurricane force winds (data source: HSIP Gold 2011).

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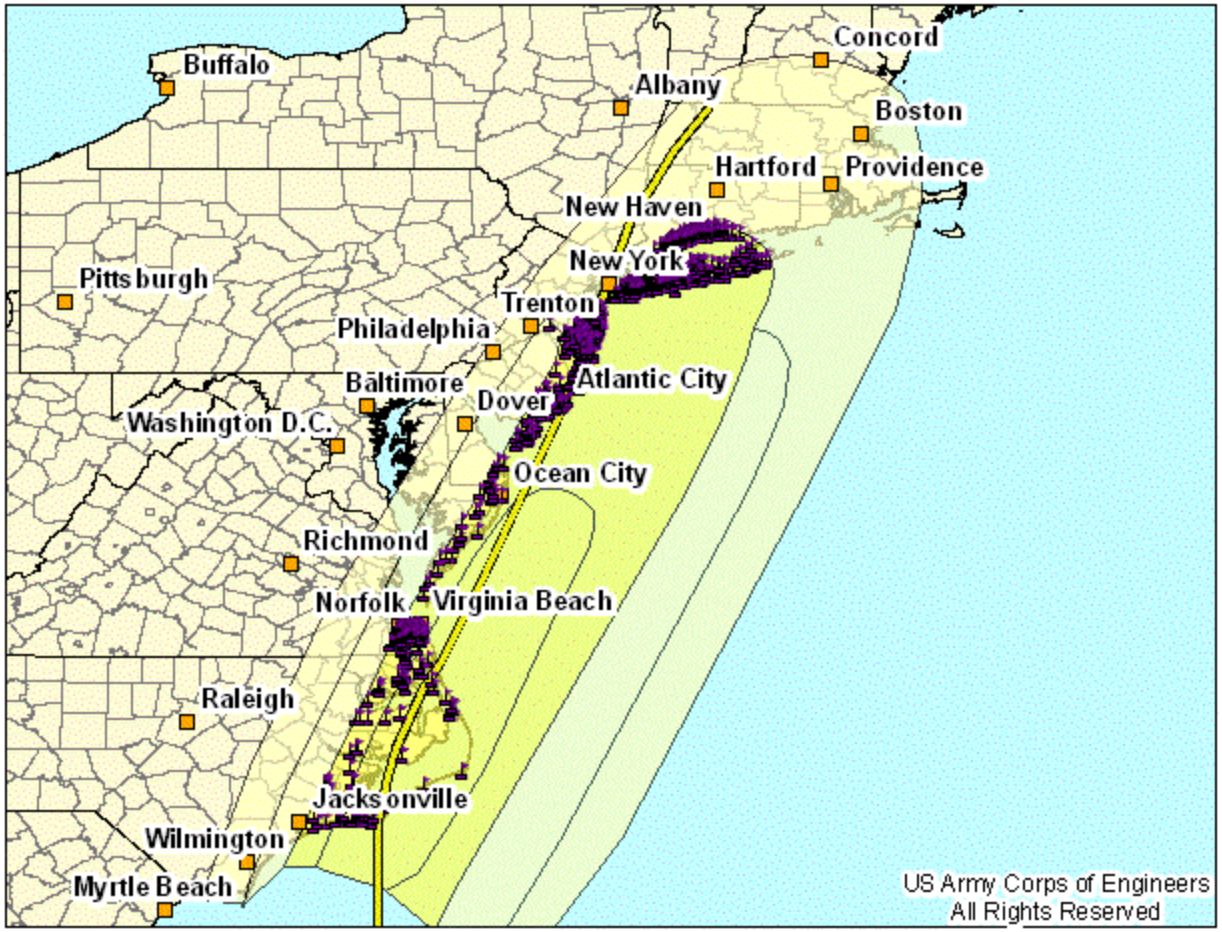
Hurricane Irene Potable Water	
Generated By: Siemsen, LRL 1100 EDT 08/30/2011	
Sources: HURREVAC LRL-DEBRIS	

US Army Corps of Engineers

Hurricane Irene Schools

Landfall Plus About 24 Hours

For Planning Purposes Only!



0 200 400 Miles

Most Probable Landfall Schools Inside Hurricane Force Winds

New York - 652
New Jersey - 355
Connecticut - 212
Virginia - 191
North Carolina - 109
Maryland - 14
Delaware - 10

Model results per County on following page

This model is based on a Category 1 storm making landfall Outer Banks, NC and New York, NY.

Schools
Historic Track

Information provided on this page displays a Category 1 storm making landfall Outer Banks, NC and New York, NY. These projections are based on information from the NHC (1700 EDT 08/28/2011) forecast.
The number of schools included in this output are those that would be included within estimated hurricane force winds (data source: HSIP Gold 2011).

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Hurricane Irene Schools	
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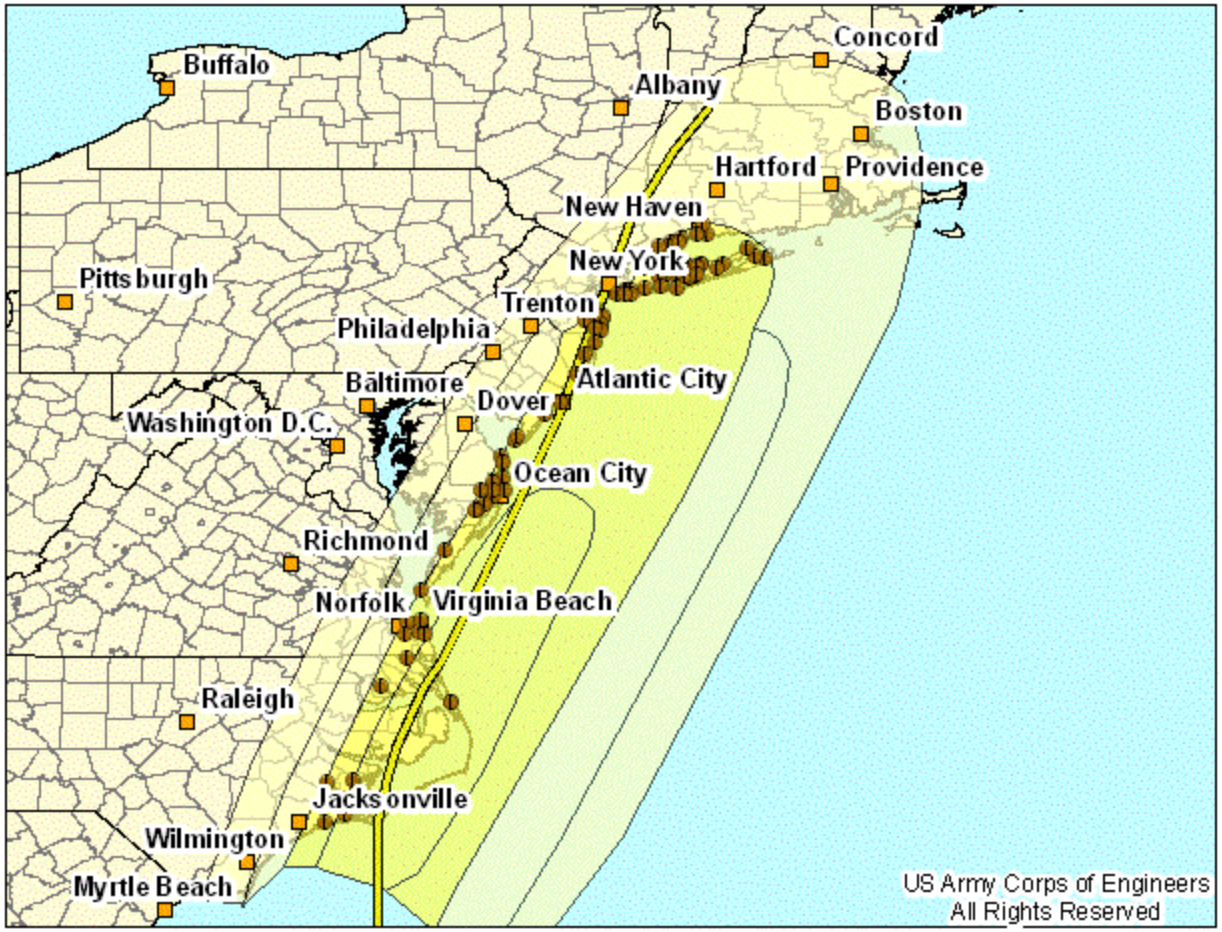
Sources: HURREVAC LRL-DEBRIS	Page 19 of 20

Hurricane Irene Sewage Treatment Plants

Landfall Plus About 24 Hours

US Army Corps of Engineers

For Planning Purposes Only!



Most Probable Landfall Sewage Treatment Plants Inside Hurricane Force Winds

New York - 39
New Jersey - 17
Connecticut - 10
North Carolina - 8
Maryland - 8
Virginia - 7
Delaware - 4

Model results per County on following page

This model is based on a Category 1 storm making landfall Outer Banks, NC and New York, NY.

Sewage Treatment Plants
Historic Track

Information provided on this page displays a Category 1 storm making landfall Outer Banks, NC and New York, NY. These projections are based on information from the NHC (1700 EDT 08/28/2011) forecast.
The number of sewage treatment plants included in this output are those that would be included within estimated hurricane force winds (data source: HSIP Gold 2011).

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Hurricane Irene Sewage Treatment Plants	
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Sources: HURREVAC LRL-DEBRIS	Page 20 of 20